Pot Setter Machine Makes "Pot-In-Pot" Production Possible

By Jim Ruen

Potted shrubs sell better, but growing shrubs in a pot is a pain, or at least it has been until now. Woodburn Nursery, Woodburn, Oregon has figured out a way to meet market demand and do it with less manual labor. Using their first-of-its-kind pot-setting rig, a five-man crew can insert about 6,000 "socket pots" per day into the ground, ready to accept potted shrubs and trees.

Tom Fessler, co-owner of the nursery, says "Our initial intent was to try an acre test plot for a year or two. But it worked so well, we're already up to about 65 acres."

Nurserymen have long known shrubs and other perennials planted in pots that are buried in the ground stand up to winter winds and cold temperatures better than those in above-ground pots. But getting the pots into the ground can be a real job. Pulling them out is not much better, especially in wet weather. Imbedding socket pots equipped with spacers makes removal and replacement of pots relatively easy. All you have to do is find a way to get them into the ground the first time.

After watching a neighbor use a post hole digger to prepare holes, Fessler figured there had to be a better way. So in 1999, he headed to his shop. Three years and tens of thousands of pots later, he is on his second rig, one built to set pots up to 16 in. across and a foot deep.

He started out by building a frame on the floor of the shop out of steel tubing that became the main platform.

A trencher wheel mounts next to the platform. Sizing a gearbox for the trencher was the most difficult part of the project, reports Fessler. "The trencher isn't turning very fast, but there is so much torque on it that we kept breaking gears," he explains. "On the second unit, we way oversized the gears. We also went to running the gearbox off the PTO instead of a hydraulic motor. We travel so slow that the hydraulic motor we used was stalling out."

The pot-setting rig excavates a ditch deeper and wider than the pot to be set, lays down a drain tile in the bottom of the ditch and an irrigation hose along the side of the ditch. Workers riding on the platform place pots in the ditch at regular intervals. Other workers walking alongside, set up spray nozzles beside each pot and fill in around the pots. Seven-pound metal lids, also fabricated in the nursery shop, are then placed over the pots to keep dirt out until the planted pots are inserted.

The entire rig floats on adjustable wheels. Raising or lowering the platform varies the depth of the trench from 8 to 12 in. deep, depending on the size of the socket pots being placed.

This past year, placement of the pots in a grid pattern across the field has become even more exacting. The nursery purchased a new John Deere 7410 tractor outfitted with a GPS-based guidance system. The autopilot allows the rig to travel in a straight line at only four tenths of a mile per hour, something manual steering could not do. Fessler is looking forward to automating the process even further.

"We use a cable with clips on it to identify when a pot should be placed in the trench," says Fessler. "We want to program the GPS unit to signal when to drop the pots in the ground."

Contact: FARM SHOW Followup, Tom Fessler, Woodburn Nursery, 11796 Monitor McKee Road N.E., Woodburn, Oregon 97071 (ph 888 634-2232; E-mail: Info@woodburnnursery.com).

Pot-setting rig excavates a ditch where pot will be set and lays down a drain tile in bottom of ditch. Irrigation pipes are run alongside.

Workers riding on platform place pots in ditch at regular intervals. Other workers walking alongside set up spray nozzles and fill in around the pots.

"Easy To Build" Poly Calf Sled

A 4 by 8 sheet of heavy duty plastic is all Roy Klindt needed to make a 6-ft. long calf sled that he pulls behind his snowmobile.

"It was cheap and easy to build," says the Crane Valley, Sask., rancher.

Klindt bought a 4 by 8 sheet of "puckboard" plastic from a local manufacturer. He used a torch to make cuts in the sheet at four places. He also used the torch to heat the plastic so he could fold the front and back sections up. He used a wooden 2 by 4 to bend the back section at a 90 degree angle and the front section at a 45 degree angle. The entire structure is bolted together with 1/4-in. bolts.

The floor of the sled bolts onto a pair of lightweight channel irons that ride on the snow, with a metal hitch bolted to it on front.

"The sled's front end slopes upward like a toboggan to keep it from getting stuck in the snow. The channel iron runners bite into the snow to keep the sled from swaying too much behind the snowmobile."

Contact: FARM SHOW Followup, Roy Klindt, Box 154, Crane Valley, Sask., Canada S0H 1B0 (ph 306 475-2225).

Roy Klindt used a 4 by 8 sheet of heavy duty plastic to make this 6-ft. long calf sled.

Electric Log Splitter

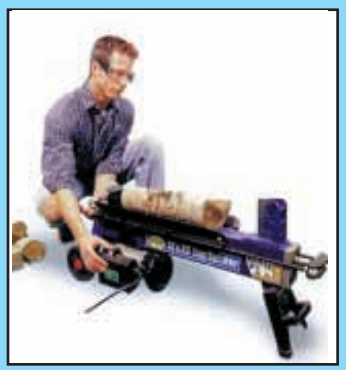
Here's a log splitter that'll chop a lot of wood but won't split your wallet or your ears.

From Fisch Precision Tools, Inc., Claysville, Penn., the 4-ton splitter is powered by a quiet 2 hp electric motor. That means no noisy gas engine and no messy hydraulics. It can handle logs up to 20 in. long and 12 in. in diameter. The design requires that one hand operate the motor switch and the other the operation handle, so both are free from danger. The ram automatically returns to the ready position after each use.

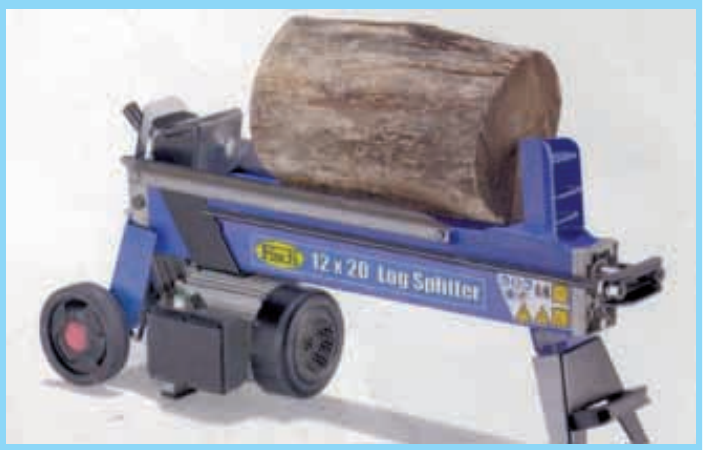
The splitter weighs only about 100 lbs., and sits on two wheels, which are set wide apart to give it stability. One person can wheel it around easily. Not recommended for greener, tough-to-split wood.

Sells for $449.99 plus freight and is warranted for a full year. It's been UL and CSA tested and approved.

Contact: FARM SHOW Followup, Fisch Precision Tools, Inc., Claysville, Penn. 15323 (ph 724 663-9072; fax 724 663-9065; Website: www.fisch-woodworking.com).



Electric splitter weighs just 100 lbs.



Four-ton log splitter is powered by a quiet 2 hp electric motor. According to the manufacturer, it'll split logs 20 in. long by 12 in. in diameter.